

INSULTHERM® TRU-FIT

HEAT TREATED, FRAY-RESISTANT, ACRYLIC COATED FIBERGLASS PROTECTS UP TO 649°C · USED IN LOW VOLTAGE APPLICATIONS

Techflex® INSULTHERM® TRU-FIT (FGL) is a braided fiberglass sleeving which has been heat treated and impregnated with an acrylic binder to reduce fraying and dusting, and improve usability and performance. FGL is engineered for applications where temperatures as high as 649°C may be encountered. FGL is used as primary insulation on low voltage applications such as leads in toasters, coffee makers, ranges and other appliances. FGL may also be used as insulation and protection for small heaters and resistors that operate at high temperatures, and to insulate over soldered connections when exposure to solder melt temperatures is possible. Insultherm® Tru-Fit provides a sturdy, long lasting and inexpensive insulation solution. It is flexible and expandable, and can easily be installed over applications with irregular shapes and tight turns. Standard color are Black and Natural, but other colors are available by special order.

SIZING CHART

Nominal Size	Part #	Diameter	Wall Thickness ±0,13mm	Expansion		*Put-Ups		Available Colors	Kgs/ 100m
				Min.	Max	M	L		
24	FGLG.24	0,6mm	0,13mm	0,5mm	0,7mm	76,2m	152,4m	6	0,12
22	FGLG.22	0,7mm	0,13mm	0,6mm	0,8mm	76,2m	152,4m	6	0,18
20	FGLG.20	0,9mm	0,23mm	0,8mm	1,0mm	76,2m	152,4m	6	0,18
18	FGLG.18	1,1mm	0,28mm	1,0mm	1,2mm	76,2m	152,4m	6	0,18
16	FGLG.16	1,3mm	0,28mm	1,3mm	1,5mm	76,2m	152,4m	6	0,25
14	FGLG.14	1,7mm	0,28mm	1,6mm	1,8mm	76,2m	152,4m	6	0,42
12	FGLG.12	2,2mm	0,28mm	2,1mm	2,3mm	30,5m	76,2m	6	0,45
11	FGLG.11	2,4mm	0,28mm	2,3mm	2,6mm	30,5m	76,2m	6	0,57
10	FGLG.10	2,7mm	0,28mm	2,6mm	2,8mm	30,5m	76,2m	6	0,52
9	FGLG.09	3,0mm	0,28mm	2,9mm	3,1mm	30,5m	76,2m	6	0,57
8	FGLG.08	3,4mm	0,28mm	3,3mm	3,6mm	30,5m	76,2m	6	0,45
7	FGLG.07	3,8mm	0,33mm	3,7mm	4,0mm	30,5m	76,2m	6	0,71
6	FGLG.06	4,2mm	0,33mm	4,1mm	4,5mm	30,5m	76,2m	6	0,71
5	FGLG.05	4,7mm	0,33mm	4,6mm	5,0mm	30,5m	76,2m	6	0,79
4	FGLG.05	5,3mm	0,41mm	5,2mm	5,7mm	30,5m	76,2m	6	0,94
3	FGLG.03	5,9mm	0,41mm	5,8mm	6,3mm	30,5m	76,2m	6	1,26
2	FGLG.02	6,7mm	0,41mm	6,6mm	7,1mm	30,5m	76,2m	6	1,52
1	FGLG.01	7,5mm	0,41mm	7,3mm	7,9mm	15,2m	30,5m	6	1,76
0	FGLG.00	8,4mm	0,41mm	8,3mm	8,8mm	15,2m	30,5m	6	2,65
3/8"	FGL0.38	9,5mm	0,41mm	9,5mm	10,1mm	15,2m	30,5m	6	2,66
7/16"	FGL0.44	11,1mm	0,46mm	11,1mm	11,7mm	15,2m	30,5m	6	3,04
1/2"	FGL0.50	12,7mm	0,46mm	12,7mm	13,3mm	15,2m	30,5m	6	3,39
5/8"	FGL0.63	15,9mm	0,46mm	15,9mm	16,6mm	15,2m	30,5m	6	3,81
3/4"	FGL0.75	19,1mm	0,46mm	19,1mm	20,0mm	15,2m	30,5m	6	6,20
1"	FGL1.00	25,4mm	0,46mm	25,4mm	26,4mm	15,2m	30,5m	6	9,09

*Put-Ups: "M" = Shop Spool and "L" = Bulk Spool



FEATURES

Material	Acrylic Coated Fiberglass
Grade	FGL
Wall Thickness	Refer To Chart
Drawing Number	TF001FGL-WD
Cutting	Scissors




ABRASION

Abrasion Resistance	VERY HIGH
Abrasion Test Machine	Taber 5150
Abrasion Test Wheel	Calibrase H-18
Abrasion Test Load	500g
Room Temperature	75°F / 24°C
Humidity	15%
Slight Fraying	200 Test Cycles
Slight Fraying	1 000 Test Cycles
Fraying	1 700 Test Cycles
Material Destroyed	2 300 Test Cycles
Pre-Test Weight	15,3g
Post-Test Weight	13,6g
Test End Loss Of Mass Point Of Destruction	1,7g

PHYSICAL PROPERTIES

Monofilament Diameter (ASTM D-204)	NA
Flammability Rating	VW-1
Recommended Cutting	Scissors
Colors	6
Wall Thickness	0,13mm - 0,46mm
Tensile Strength (Yarn) (ASTM D-2256 Lbs)	NA
Specific Gravity (ASTM D-792)	1,0 - 1,8
Moisture Absorption % (ASTM D-570)	0,01%
Hard Vacuum Data (ASTM E-595 at 10 ⁻⁵ torr)	NA
TML	0,02
CVCM	0,01
WVR	0,00
Smoke D-Max (ASTM E-662)	NA
Outgassing	Low
Oxygen Index (ASTM D-2863)	NA

CERTIFICATIONS

			VW-1
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COLORS



Black (BK), Blue (BL), Red (RD), Yellow (YL), Natural (NT), White (WH)

* Some of the sizes in some colors are available for special order

FLAMMABILITY

Rating	UL VW-1
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OPERATING TEMPERATURES

Melt Point (ASTM D-2117)	2,048°F / 1,120°C
Maximum Continuous (Mil-I-23053)	1,202°F / 650°C
Minimum Continuous (Mil-I-23053)	-94°F / -70°C

CHEMICAL RESISTANCE

1=No Effect 2=Little Effect 3=Affected 4=More Affected 5=Severely Affected

Aromatic Solvents	1
Aliphatic Solvents	1
Chlorinated Solvents	1
Weak Bases	1
Salts	1
Strong Bases	1
Salt Water (0-S-1926)	1
Hydraulic Fluid (MIL-H-5606)	1
Lube Oil (MIL-L-7808)	1
De-Icing Fluid (MIL-A-8243)	1
Strong Acids	2
Strong Oxidants	2
Esters/Ketones	1
UV Light	2
Petroleum	1
Fungus (ASTM G-21)	1
Halogen Free	Yes
RoHS	Yes
SVHC	None